#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 01/06/00 Date Received: 12/22/99

Project: Metro Grab, PO# M63234

Date Extracted: 12/27/99 Date Analyzed: 12/30/99

### RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

# Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID		Chromium	Copper	<u>Nickel</u>	<u>Zinc</u>
M63234		0.12	0.15	0.13	0.05
Method Blan	nk	< 0.05	< 0.05	< 0.05	< 0.05

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 01/06/00 Date Received: 12/22/99

Project: Metro Grab, PO# M63234

## QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 912120-01 (Duplicate)

Acceptance
e Criteria
0-20
0-20
0-20
0-20

Laboratory Code: (Matrix Spike)

		Reporting	Spike	Sample	% Recov	ery % Recov	ery A	Acceptanc	<b>e</b>	
Anal	yte	Units	Level	Result	MS	MSD	7 to 15 to 15	Criteria	RPD	
Chro	mium	mg/L (ppm)	5	< 0.05	90	88		80-120	$\overline{}$	
Copp	$\mathbf{er}$	mg/L (ppm)	5	< 0.05	89	87		80-120	${f 2}$	
Nick	el	mg/L (ppm)	10	< 0.05	90	88		80-120	2	
Zinc		mg/L (ppm)	5	0.21	93	91		80-120	2	

Laboratory Code: Laboratory Control Sample

	Reporting	Spike 9	% Recove	ery % Recov	ery Acceptance	e 💎	
Analyte	Units	Level	LCS	LCSI	O Criteria	hoRPD	
Chromium	mg/L (ppm)	5	84	88	80-120	5	
Copper	mg/L (ppm)	5	83	87	80-120	5	
Nickel	mg/L (ppm)	10	84	89	80-120	6	
Zinc	mg/L (ppm)	5	88	92	80-120	4	

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

January 6, 2000

#### **DUPLICATE COPY**

#### INVOICE #00ACU0106-1

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor Grab-PO# M63061: Results of testing requested by Gerry Thompson for material submitted on December 22, 1999.

1 water sample analyzed for
Chromium, Copper, Nickel, and Zinc
using Method 6010 @ \$80 per sample

\$ 80.00

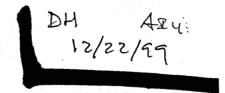
Amount Due \$ 80.00

PLEASE NOTE: As a convenience for our valued clients, we can accept credit cards (VISA, MasterCard or government purchasing cards) for payment on our invoices. Please contact our office if you would like to take advantage of this service.

FEDERAL TAX ID 7(b) (6)

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

# 1+912102



## SAMPLE CHAIN OF CUSTODY

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City, State, Zip, See	He in			25.0		
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SAMPLERS (signature)					PROJECT LOCA	TION
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		Santan Selection (			Dispose after 30 Return Samples	
					Call for Instruction	
Sample #	Date/Time Sampled	Type of Sample	# of Jars	Lab Sample #	Analy Reques	
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FORMS/COC

11/29/99

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

January 6, 2000

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted December 22, 1999 from your Metro Grab, PO# M63234 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Dianne C. Hurt Project Manager

Enclosures ACU0106R.DOC